

In the Claims:

1-105. (Cancelled.)

106. (Currently amended.) A selectively configured porous particulate material comprising a porous particulate material treated with a liquid resin, plastic, cement, sealant or binder, wherein (i) the porous particulate material has inherent or induced ~~permeability and permeability~~; (ii) the porous particulate material is selected from the group consisting of porous ceramics, polyolefins, styrene-divinylbenzene copolymers and polyalkylacrylate esters, and further wherein esters; (iii) the apparent specific gravity of the selectively configured porous particulate material is less than the apparent specific gravity of the porous particulate material; and (iv) the porous particulate material is not a cluster of particulates.

107. (Previously presented.) The selectively configured porous particulate material of Claim 106, wherein the porous particulate material is a natural or non-natural porous ceramic.

108. (Previously presented.) The selectively configured porous particulate material of Claim 106, wherein the selectively configured porous particulate material exhibits crush resistance under conditions as high as 10,000 psi closure stress.

109. (Previously presented.) The selectively configured porous particulate material of Claim 106, wherein the porous particulate material has a porosity and permeability such that a fluid may be drawn at least partially into its matrix by capillary action.

110. (Previously presented.) The selectively configured porous particulate material of Claim 106, wherein the porous particulate material has a porosity and permeability such that a penetrating material may be (i) drawn at least partially into its matrix using a vacuum; (ii) forced at least partially into its porous matrix under pressure; or (iii) a combination of (i) and (ii).

111. (Cancelled.)

112. (Previously presented.) The selectively configured porous particulate material of Claim 106, wherein the selectively configured porous particulate material is a porous particulate material treated with a phenol, phenol formaldehyde, melamine formaldehyde, urethane or epoxy resin.

113. (Cancelled.)

114. (Currently amended.) The selectively configured porous particulate material of Claim ~~169~~ 130, wherein the selectively configured porous particulate material is a porous particulate material treated with a penetrating, coating, a glassy glazing material or a combination thereof which is capable of trapping or encapsulating a fluid having an apparent specific gravity less than the apparent specific gravity of the matrix of the porous particulate material.

115. (Previously presented.) The selectively configured porous particulate material of Claim 114, wherein the fluid is a gas.

116. (Previously presented.) The selectively configured porous particulate material of Claim 106, having a size between from about 200 mesh to about 8 mesh.

117. (Cancelled.)

118. (Cancelled.)

119. (Previously presented.) The selectively configured porous particulate material of Claim 106, wherein the permeability of the selectively configured porous particulate material is less than the permeability of the porous particulate material.

120. (Cancelled.)

121. (Cancelled.)

122. (Currently amended.) The selectively configured porous particulate material of Claim ~~169~~ 106, wherein ~~individual particles of the porous particulate material have~~ has a maximum length-based aspect ratio of equal to or less than about 5.

123. (Previously presented.) A composition comprising the selectively configured porous particulate material of Claim 106 and a carrier fluid.

124. (Previously presented.) The composition of Claim 123, wherein the porous particulate material of the selectively configured porous particulate material is (i) relatively lightweight, (ii) substantially neutrally buoyant or a combination of (i) and (ii).

125. (Previously presented.) The composition of Claim 123, wherein the carrier fluid is non-gelled.

126. (Previously presented.) The composition of Claim 123, wherein the carrier fluid is a completion or workover brine.

127. (Previously presented.) The composition of Claim 123, wherein the carrier fluid is salt water, fresh water, a liquid hydrocarbon, or a gas or a mixture thereof.

128. (Previously presented.) The composition of Claim 127, wherein the gas is nitrogen or carbon dioxide.

129. (Previously presented.) The composition of Claim 123, further comprising at least one member selected from the group consisting of gelling agents, crosslinking agents, gel breakers, surfactants, foaming agents, demulsifiers, buffers, clay stabilizers, acids and mixtures thereof.

130. (Currently amended.) A selectively configured porous particulate material comprising a porous particulate material coated or penetrated with a liquid resin, plastic, cement, sealant or binder, wherein (i) the porous particulate material has inherent or induced ~~permeability~~ and permeability; (ii) the porous particulate material is selected from the group consisting of porous ceramics, polyolefins, styrene-divinylbenzene copolymers and polyalkylacrylate ~~esters~~, ~~and further wherein esters~~; (iii) the strength of the selectively configured porous particulate material is greater than the strength of the porous particulate ~~material~~ material; and (iv) the porous particulate material is not a cluster of particulates.

131. (Previously presented.) The selectively configured porous particulate material of Claim 130, wherein the porous particulate material has a porosity and permeability such that a fluid may be drawn at least partially into its matrix by capillary action.

132. (Cancelled.)

133. (Cancelled.)

134. (Cancelled.)

135. (Previously presented.) The selectively configured porous particulate material of Claim 130, wherein the porous particulate material is (i) relatively lightweight, (ii) substantially neutrally buoyant or a combination of (i) and (ii).

136. (Previously presented.) A composition comprising the selectively configured porous particulate material of Claim 130 and a carrier fluid.

137. (Previously presented.) A selectively configured porous particulate material comprising a porous particulate material having inherent or induced permeability which ~~is treated~~ or modified with a glassy glazing material.

138. (Previously presented.) The selectively configured porous particulate material of Claim 137, wherein the apparent density or apparent specific gravity of the

selectively configured porous particulate material is less than the apparent density or apparent specific gravity of the porous particulate material.

139. (Previously presented.) The selectively configured porous particulate material of Claim 137, wherein the glazed surface enhances the ease of multi-phase fluid flow through a particulate pack.

140. (Cancelled.)

141. (Cancelled.)

142. (Cancelled.)

143. (Cancelled.)

144. (Cancelled.)

145. (Currently amended.) The selectively configured porous particulate material of Claim ~~140~~ 137, wherein the porous particulate material is a natural or non-natural porous ceramic.

146. (Cancelled.)

147. (Cancelled.)

148. (Cancelled.)

149. (Cancelled.)

150. (Currently amended.) A composition comprising the selectively configured porous particulate material of Claim ~~140~~ 137 and a carrier fluid.

151. (Previously presented.) The composition of Claim 150, wherein the carrier fluid is non-gelled.

152. (Previously presented.) The composition of Claim 150, wherein the porous particulate of the selectively configured porous particulate material is (i) relatively lightweight, (ii) substantially neutrally buoyant or a combination of (i) and (ii).

153. (Previously presented.) The composition of Claim 150, wherein the carrier fluid is a completion or workover brine.

154. (Previously presented.) The composition of Claim 150, wherein the carrier fluid is liquefied or foamed.

155. (Cancelled.)

156. (Cancelled.)

157. (Cancelled.)

158. (Cancelled.)

159. (Cancelled.)

160. (Previously presented.) The selectively configured porous particulate material of Claim 114, wherein a clay stabilizer is applied to the exterior surface of the porous particulate material to inhibit penetration of the coating or penetrating material.

161. (Previously presented.) A selectively configured porous particulate material comprising a porous particulate material having a coating layer of thickness from about 1 to about 5 microns, wherein the porous particulate material has inherent or induced permeability and is selected from the group consisting of porous ceramics, polyolefins, styrene-divinylbenzene copolymers and polyalkylacrylate esters, and further wherein the apparent specific gravity of the selectively configured porous particulate material is less than the apparent specific gravity of the porous particulate material.

162. (Previously presented.) The selectively configured porous particulate material of Claim 161, wherein the porous particulate material is a natural or non-natural porous ceramic.

163. (Previously presented.) The selectively configured porous particulate material of Claim 161, wherein the porous particulate material has a porosity and permeability such that a fluid may be drawn at least partially into its matrix by capillary action.

164. (Previously presented.) The selectively configured porous particulate material of Claim 161, wherein the permeability of the selectively configured porous particulate material is less than the permeability of the porous particulate material.

165. (Previously presented.) The selectively configured porous particulate material of Claim 161, wherein individual particles of the porous particulate material have a maximum length-based aspect ratio of equal to or less than about 5.

166. (Previously presented.) A composition comprising the selectively configured porous particulate material of Claim 161 and a carrier fluid.

167. (Previously presented.) The composition of Claim 166, wherein the porous particulate material of the selectively configured porous particulate material is (i) relatively lightweight, (ii) substantially neutrally buoyant or a combination of (i) and (ii).

168. (Previously presented.) The composition of Claim 166, wherein the carrier fluid is salt water, fresh water, a liquid hydrocarbon, or a gas or a mixture thereof.

169. (Cancelled.)

170. (Currently amended.) The selectively configured porous particulate material of Claim ~~169~~ 130, wherein the porous particulate material is a natural or non-natural porous ceramic.

171. (Cancelled.)

172. (Cancelled.)

173. (Cancelled.)

174. (Cancelled.)

175. (Currently amended.) A composition comprising the selectively configured porous particulate material of Claim ~~169~~ 181 and a carrier fluid.

176. (Previously presented.) The composition of Claim 175, wherein the porous particulate material of the selectively configured porous particulate material is (i) relatively lightweight, (ii) substantially neutrally buoyant or a combination of (i) and (ii).

177. (Previously presented.) The composition of Claim 175, wherein the carrier fluid is non-gelled.

178. (Previously presented.) The composition of Claim 175, wherein the carrier fluid is a completion or workover brine.

179. (Previously presented.) The composition of Claim 175, wherein the carrier fluid is salt water, fresh water, a liquid hydrocarbon, or a gas or a mixture thereof.

180. (Cancelled.)

181. (New.) A selectively configured porous particulate material comprising a porous particulate material having inherent or induced permeability treated or modified with a glazing material, the glazing material having been fired onto the porous particulate material.

182. (New.) The selectively configured porous particulate material of Claim 181, wherein the glazing material is selected from the group consisting of magnesium oxide-based materials, boric acid, boric oxide-based materials and powdered glass with oxides.

183. (New.) The selectively configured porous particulate material of Claim 181, wherein the glazed surface enhances the ease of multi-phase fluid flow through a particulate pack.

184. (New.) The selectively configured porous particulate material of Claim 181, wherein the glazed surface of the porous particulate material enhances the ease of high rate turbulent gas flow through a particulate pack.

185. (New.) A selectively configured porous particulate material comprising a porous particulate material having inherent or induced permeability prepared by coating onto the porous particulate material a smooth, glassy glazing material and firing the glazing material onto the porous particulate material.

186. (New.) The selectively configured porous particulate material of Claim 130, having a size between from about 200 mesh to about 8 mesh.

187. (New.) The composition of Claim 136, wherein the carrier fluid is non-gelled.

188. (New.) The composition of Claim 136, wherein the carrier fluid is salt water, fresh water, a liquid hydrocarbon, or a gas or a mixture thereof.

189. (New.) The composition of Claim 188, wherein the gas is nitrogen or carbon dioxide.

190. (New.) The selectively configured porous particulate material of Claim 185, wherein the porous particulate material is a natural or non-natural porous ceramic.